

ABSTRACT OF THE DISCLOSURE

A system, device, and method for managing communication services
5 in an optical communication system utilizes a optical service agent (OSA) that
operates within the domain of the network user and manages various
communication services on behalf of the network user. The OSA interacts
with the optical communication network to obtain various communication
services and manages those communication services for the network user
10 based upon predetermined parameters defined by the network user. An
authenticated auto-discovery mechanism is used to automatically identify
and authenticate OSA-enabled users and to distribute information between
peer OSA-enabled users. A peer-to-peer signaling mechanism is used to
extend OSA functionality to OSA-enabled users that do not interface directly
15 with the optical communication network.